

METHOD FOR PRECISE MOLDING AND ALIGNMENT OF STRUCTURES ON A SUBSTRATE USING A STRETCHABLE MOLD

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Abstract of the Disclosure

A method for molding and aligning microstructures on a patterned substrate using a microstructured mold. A slurry containing a mixture of a ceramic powder and a curable fugitive binder is placed between the microstructure of a stretchable mold and a patterned substrate. The mold can be stretched to align the microstructure of the mold with a predetermined portion of the patterned substrate. The slurry is hardened between the mold and the substrate. The mold is then removed to leave microstructures adhered to the substrate and aligned with the pattern of the substrate. The microstructures can be thermally heated to remove the binder and optimally fired to sinter the ceramic powder.

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